REMARKS

The Office Action dated September 9, 2003, has been received and carefully noted. The above amendments to the specification and drawings, and the following remarks, are submitted as a full and complete response thereto. Claims 2-23 are pending in the above-cited application and are again submitted for consideration.

The above amendments to the specification and the drawings were made in response to the Office's objection to the drawings made in the September 9, 2003 Office Action. No new matter has been added and Applicants respectfully assert that no new issues are being raised which require further consideration and/or search.

In the prior Office Action, the drawings were objected to under 37 C.F.R. §1.83(a) because it was alleged that the drawings failed to show every feature of the invention as specified in the claims. Applicants have amended the drawings to add Fig. 4 that explicitly illustrates all of the features of the invention as claimed. The elements illustrated in Fig. 4 find support from the specification of the instant application, including the originally filed claims, and the provisional application, 60/103,688, upon which the instant application claims priority from under 35 U.S.C. §119(e). No new matter has been entered. Changes to the specification have also been made to comport with the changes to the drawings. Reconsideration and withdrawal of the objection to the drawings are respectfully requested.

Claims 2-4 and 21 were again rejected under 35 U.S.C. §102(b) as being anticipated by *Crayford* (U.S. Patent No. 5,404,544). Claims 5-20 and 22-23 were again rejected under 35 U.S.C. §103(a) as being obvious over *Crayford* in view of *Wakeley et al.* (U.S. Patent No. 6,198,727). The above rejections are again respectfully traversed based on the remarks that follow.

The present invention, as recited in claim 2, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit. The transmitter subcircuit and the receiver subcircuit each have their own power supply and means for activation and deactivation.

The present invention, as recited in claim 10, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to an industry-standard pulse for indicating a live transceiver, and a receiver subcircuit having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode. The transmitter and receiver subcircuits each have its own power supply and means for activation and deactivation.

The present invention, as recited in claim 17, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit transmitting a minimally powered link pulse during powered-down mode to indicate a live transceiver circuit, the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit having a media independent interface for receiving data, where the receiver subcircuit remains power-on during powered-down mode and upon receiving signal activity activates the transceiver into power-on mode. The transmitter and receiver subcircuits each have its own power supply and means for activation and deactivation.

The present invention, as recited in claim 21, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes transmitter subcircuit means for transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver, and receiver subcircuit means for receiving data. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation.

The present invention, as recited in claim 22, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes transmitter subcircuit means for transmitting a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to an industry-standard pulse for indicating a live transceiver and receiver subcircuit means for

having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation.

The present invention, as recited in claim 23, is directed to a transceiver circuit for transmitting and receiving industry-standard data signals. The transceiver circuit includes a transmitter subcircuit means for transmitting a minimally powered link pulse during powered-down mode to indicate a live transceiver circuit, the pulse does not conform to industry-standard pulse for indicating a live transceiver, and a receiver subcircuit means having a media independent interface for receiving data, the receiver subcircuit remains power-on during powered-down mode and upon receiving signal activity activates the transceiver into power-on mode. The transmitter subcircuit means and the receiver subcircuit means each have its own power supply and means for activation and deactivation.

The present invention is directed to transceiver and transceiver circuits having separate subcircuits, where each subcircuit has its own power supply and means of activation and deactivation. The invention allows for portions of the transceiver to be powered-down and to minimize energy usage during an idle period. Applicants respectfully submit that each of claims 2-23 recite subject matter which is neither disclosed nor suggested in the cited prior art.

Crayford is directed to a network connection system that allows for the power consumption of an Ethernet connection to be managed by the operating software/hardware. When in the "link good" condition, a 10BASE-T transceiver is required to output a link status (LNKST) signal to this effect. The Media Access Controller (MAC) 30, with an embedded 10BASE-T transceiver (37), uses the LNKST signal to provide power management to the MAC (30). By using the programmable AWAKE bit, the receive section of the 10BASE-T transceiver (37) can remain powered, even if the SLEEP input to the MAC (30) is activated. This allows the transceiver (37) to detect a link beat pulse (60) or receive packet activity. While both the current invention and *Crayford* are concerned with power management of a connection, how they each accomplish this management is quite different.

Claim 2 recites, in part, that "the pulse does not *conform to industry-standard pulse for indicating a live transceiver*." Similar limitations can be found in independent claims 10, 17 and 21-23. In the "Response to Amendment/Arguments" section of the last Office Action, the Office appears to take the position that *Crayford* teaches a pulse that conforms with "10Base standards and not conform to industry-standard pulse which is the 100Base (MLT3) standard." Thus, from the Office's apparent logic, the pulse sent out in *Crayford* fails to conform to the industry-standard 100Base-T, and claim 2 reads on the subject matter of *Crayford.* However, it also appears that the Office also acknowledges that the pulse in *Crayford* conforms with the industry-standard 10Base-T. Such a position does not appear to be consistent.

Applicants respectfully assert that claim 2, for example, does NOT recite that the pulse does not conform to a *specifically recited* industry-standard pulse for indicating a live transceiver. Based on a plain reading of the claim, a pulse that conforms to any industry-standard pulse for indicating a live transceiver would not meet the limitations of the claim. Thus, Applicants respectfully assert that while *Crayford* could be read to imply that the beat pulse fails to conform with the 100Base-T standard, since the pulse does conform with the 10Base-T standard, *Crayford* cannot teach or suggest all of the elements of claim 2.

Additionally, the Office Action also alleges that "[t]he limitations (e.g. the differences stated in the arguments) in the specification do not read in the claim when these limitations are not recited in the claim." However, all of Applicants' arguments were directed to the claims, and the Office's pronouncement does not appear to be correct.

The sections of *Crayford* indicated by the Office Action as teaching the limitation in question merely recites that the LNKST signal is used to provide power management to the MAC. The only pulse discussed in *Crayford* is the link beat pulse 60 that is produced by the 10BASE-T transceiver to establish a link in the network is in place. Nowhere does *Crayford* establish that such a pulse would not conform to industry-standard pulses for indicating a live transceiver. A standard reading of the claims would not lead one to believe that the pulse in *Crayford* meets the limitations of the claims because the does not conform to the 100Base-T standard. As such, Applicants

respectfully assert that *Crayford* cannot anticipate the subject matter of claims 2-4 and 21.

Similarly, Applicants respectfully assert that there is no teaching or suggestion in *Crayford* to modify that reference to reach the claims of the instant invention. As discussed above, while *Crayford* and the instant invention may have similar objectives, i.e. power management, they provide that management differently. To suggest that it would have been obvious to modify *Crayford* to have a transmitter subcircuit transmit a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver, would change the operation of the system described in *Crayford.* If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). As such, Applicants respectfully assert that such a modification of *Crayford* to reach the claims of the instant application would be improper and that the claims are not rendered obvious over *Crayford* alone.

With respect to the rejection of claims 5-20, 22 and 23, *Wakeley et al.* is also cited to cure the deficiencies of *Crayford*, namely an industry-standard pulse, a transceiver with an auto-negotiation mode and a receiver having a media independent interface. Even if it were accepted that *Wakeley et al.* teaches the above recited deficiencies of *Crayford*, *Wakeley et al.* would still not teach the use of a transmitter subcircuit transmit

a pulse during powered-down mode to indicate a live transceiver circuit, wherein the pulse does not conform to industry-standard pulse for indicating a live transceiver. As such, Applicants respectfully assert that the rejection of claims 5-20, 22 and 23 is improper and should be withdrawn.

Claims 2-23 are pending. Claims 3-9 depend from independent claim 1, claims 11-16 depend from independent claim 10 and claims 18-20 depend from claim 17. The Applicant respectfully submits that claims 3-9, 11-16 and 18-20 are additionally allowable for their dependency from allowable base claims, as well as for the additional subject matter recited therein. As such, the Applicants respectfully request allowance of claims 2-23 and the prompt issuance of a Notice of Allowability.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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